

PATENT

Serial No: 10/743,711
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IN THE CLAIMS:

This listing of claims will replace all prior revisions, and listings, of the claims in the application:

Listing of Claims:

1. (Currently Amended) A branch prediction architecture comprising:
a prediction selector;
a bimodal predictor coupled to the prediction selector, the bimodal predictor to generate a bimodal prediction for a branch instruction; and
a plurality of global predictors coupled to the prediction selector, each global predictor to generate a corresponding global prediction for the branch instruction, the prediction selector to select a branch prediction from the bimodal prediction and the global predictions, wherein each global prediction is to be generated based on a different amount of global branch history information;
a first global predictor to generate a first global prediction by indexing into a first global array based on a first index, the first index to be associated with a first amount of global branch history information; and
a second global predictor to generate a second global prediction by indexing into a second global array based on a second index, the second index to be associated with a second amount of global branch history information and folding the second index to obtain a smaller index for use in indexing into the second global array, the first amount to be less than the second amount.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The branch prediction architecture of claim [[3]] 1, wherein the branch prediction architecture is to generate the first index by shifting a most recent branch bit into a